

HIV infection has become a chronic disease, requiring long term management strategies and greater attention to disease prevention issues. As such, statins are expected to become a cornerstone of coronary artery disease prevention since emerging evidence suggests that HIV infected persons receiving anti-retroviral combination therapy, particularly protease inhibitor containing regimens, are at increased risk for cardiovascular morbidity and mortality by mechanisms that are not fully understood yet.^{1,2} Our study provides evidence that statins improve a clinically relevant cardiovascular surrogate end point and further corroborate and extend findings of a recent study by Stein showing a trend towards improvement of FMD in HIV patients. While significant beneficial effects of statins on vascular endothelial function have previously been demonstrated in a range of patient populations with hypercholesterolaemia, the present study extends these results to HIV positive individuals. The decrease in total cholesterol and LDL cholesterol in the present study was considerably less than reported from large lipid lowering studies using identical doses of pravastatin in hypercholesterolaemic subjects. The relatively modest effects on plasma lipids in the present and previous studies in HIV patients may in part be explained by pharmacokinetic interactions. Indeed, in combination with protease inhibitors, plasma concentration of simvastatin increased 30-fold, while pravastatin concentrations were found to decline by 50%.⁵

In conclusion, the results of the present study demonstrate that statin treatment beneficially impacts on a clinically relevant surrogate marker of cardiovascular disease. The definitive answer as to the net effect of statins on cardiovascular events in HIV patients can only be provided by large scale prospective randomised clinical trials.

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Disease progression and adverse events in patients listed for elective percutaneous coronary intervention

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Objective: To record disease progression and the timing of adverse events in patients on a waiting list for elective percutaneous coronary intervention (PCI).

Design: Observational prospective study.

Settings: A UK tertiary cardiothoracic centre, at a time when waiting lists for PCI were up to 18 months.

Patients: 145 patients (116 men, median age 59.5 years) placed on an elective waiting list for PCI between October 1998 and September 1999.

Main outcome measures: Adverse events recorded were death, myocardial infarction, need for urgent hospital admission because of unstable angina, and need for emergency revascularisation while waiting for PCI.

Results: During a median follow up of 10 months (range 1–18 months), nine (6.2%) patients experienced an adverse event. Eight (5.52%) patients were admitted with unstable angina as emergencies. One was admitted with a myocardial infarction. Twenty nine (20.0%) patients had significant disease progression at the time of the repeat angiogram before PCI. In 10 (7%), disease had progressed so that PCI was no longer feasible and patients were referred for coronary artery bypass graft. Sixteen (11%) were removed from the PCI waiting list because of almost complete resolution of their anginal symptoms.

Conclusion: Adverse coronary events and clinically significant disease progression occur commonly in patients waiting for PCI. Despite the presence of severe coronary lesions, myocardial infarction was rare and no patients died while on the waiting list. Resolution of anginal symptoms was also comparatively common. The pathophysiology of disease progression frequently necessitates a change in the treatment of patients waiting for PCI.

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